

**LISTING OF CLAIMS:**

Claims 1-19. Cancelled.

--20. (Original) A reactor for pyrolytic conversion of biomass material into charcoal and gas comprising,

a housing having a proximal end, a distal end and a sealable opening for receiving a removable canister containing said material;

a heater;

a first valved gas exit orifice at the proximal end of said housing; a second valved gas exit orifice at the distal end of said housing;

a valved air entry orifice for introducing air to the proximal end of said canister;

insulation surrounding at least a portion of the sides of said canister;

said canister being receivable in said housing such that there is minimal exposure of the contents of said canister to the atmosphere when said sealable opening is open.

21. (Original) A reactor according to claim 20 wherein said heater comprises a resistance heater located to heat the biomass material in the distal end of said canister.

22. (Original) A reactor according to claim 20 further comprising an exterior burner communicating with said second valved gas exit.

23. (Original) A reactor according to claim 20 wherein said valved entry orifice comprises a tube passing through the distal end of said housing and having an open end at the proximal end of said canister.

24. (Original) A reactor according to claim 20 wherein said housing is vertically positioned so that said proximal end is at the top and said distal end is at the bottom.--